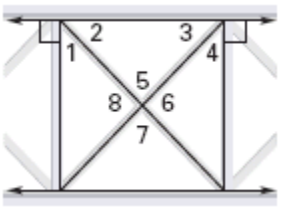
TARGETS 2E & 2F

Name_____**Date**_____

Stair Railing A stair railing is designed as shown in the figure. Use the angles identified in the figure to name two pairs of the indicated type of angle pair.



1. Complementary angles
2. Supplementary angles
3. Vertical angles
4. Linear pair
5. Adjacent angles

∠1 and ∠2 are complementary angles and ∠2 and ∠3 are supplementary angles. Given the measure of ∠1, find *m*∠2 and *m*∠3

6. $m\angle 1 = 80°$

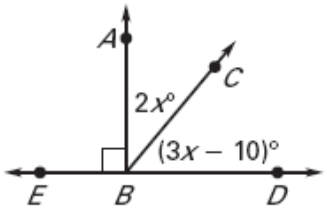
7. $m\angle 1 = 33°$

8. $m\angle 1 = 72°$

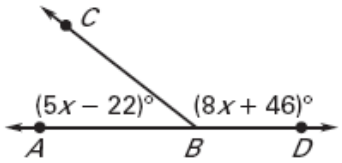
9. $m\angle 1 = 7°$

Find *m*∠*ABC* and *m*∠*CBD* for numbers 10 & 11.

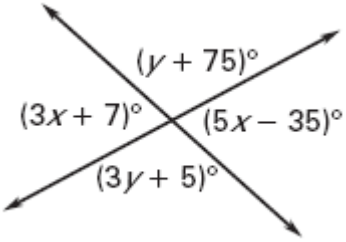
10.



11.



12. Solve for x and y.



TARGETS 2E & 2F ANSWERS:

1. $\angle 1$ and $\angle 2$, $\angle 3$ and $\angle 4$
2. *Sample answer*: $\angle 5$ and $\angle 6$, $\angle 7$ and $\angle 8$
3. $\angle 5$ and $\angle 7$, $\angle 6$ and $\angle 8$
4. *Sample answer*: $\angle 5$ and $\angle 8$, $\angle 6$ and $\angle 7$
5. *Sample answer*: $\angle 1$ and $\angle 2$, $\angle 5$ and $\angle 6$
6. 10^o; 170^o
7. 57^o; 123^o
8. 18^o; 162^o
9. 83^o; 97^o
10. 40^o; 50^o
11. 38^o; 142^o
12. $x = 21$, $y = 35$